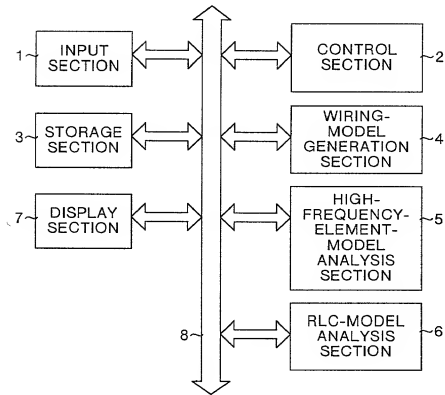


FIG.1



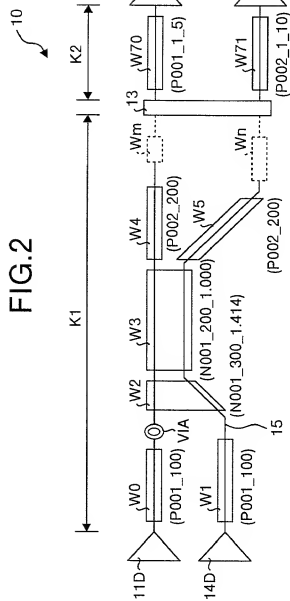


FIG.3A

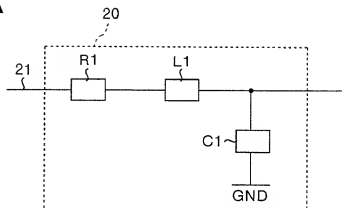


FIG.3B

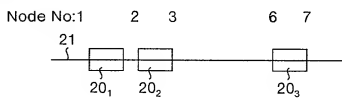


FIG.3C

22							
Xaaaa	[node1]	[node2]	LINE01	R1=[R1]	L1=[L1]N	C1=[C1]P	

FIG.3D

23							
X0	1	2	LINE01	R1=0.003	L1=1.200N	C1=0.330P	
X1	2	3	LINE01	R1=0.003	L1=1.200N	C1=0.330P	
⋮							
X5	6	7	LINE01	R1=0.001	L1=0.400N	C1=0.110P	

FIG.4A

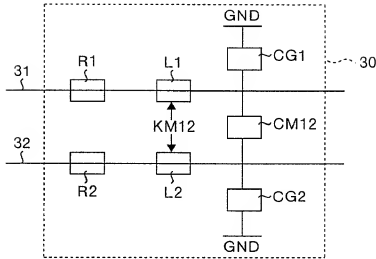


FIG.4B

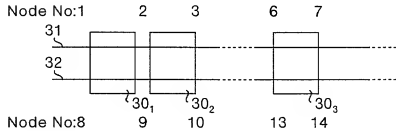


FIG.4C

33

Xaaaa	[D-ed-node1]	[D-ed-node2]	[D-ing-node1]	[D-ing-node2]	LINE02
+	R1=[R1]	L1=[L1]N	CG1=[CG1]P		
+	R2=[R2]	L2=[L2]N	CG2=[CG2]P		
+	CM12=[CM12]P	KM12=[KM12]			

FIG.4D

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X0	1	2	8	9	LINE02	R1=0.003	L1=1.200N	C1=0.330P
+						R1=0.002	L1=1.000N	C1=0.200P
+						CM12=0.300P	KM12=0.200	
X1	2	3	9	10	LINE02	R1=0.003	L1=1.200N	C1=0.330P
+						R1=0.002	L1=1.000N	C1=0.200P
+						CM12=0.300P	KM12=0.200	
.								
.								
X5	6	7	13	14	LINE02	R1=0.0015	L1=0.600N	C1=0.165P
+						R1=0.001	L1=0.500N	C1=0.100P
+						CM12=0.150P	KM12=0.200	

FIG.5A

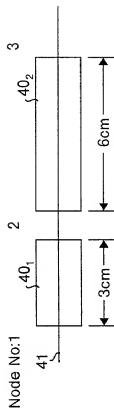


FIG.5B

42

Waaaa	[node1]	0	[node2]	0	RLGFile=[HIGH-FREQUENCY-ELEMENT FACTOR NAME]	N=1	L=[length]
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FIG.5C

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W001	1	0	2	0	RLGFile=P001_100	N=1	L=0.03
W002	2	0	3	0	RLGFile=P001_100	N=1	L=0.06

FIG.6A

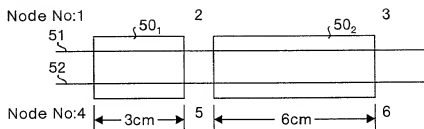


FIG.6B

53

Waaaa	[d-ed-node1]	[d-ing-node1]	0	[d-ed-node2]	[d-ing-node2]	0
+	RLGCfile=[HIGH-FREQUENCY-ELEMENT FACTOR NAME] N=2 L=[length]					

FIG.6C

54

W001	1	4	0	2	5	0	RLGCfile=n001_254	N=2	L=0.03
W002	2	5	0	3	6	0	RLGCfile=n001_254	N=2	L=0.06

FIG.7A

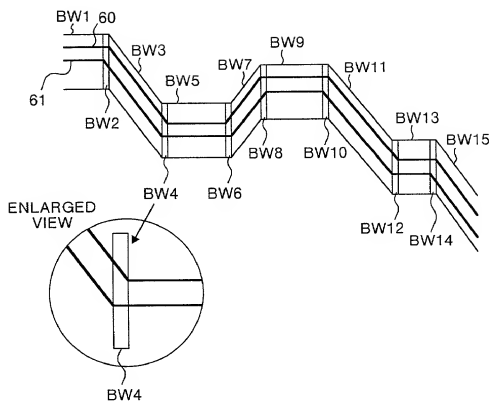


FIG.7B

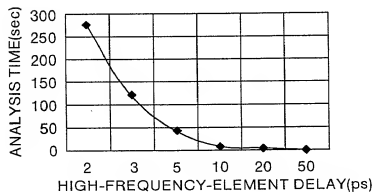


FIG.8

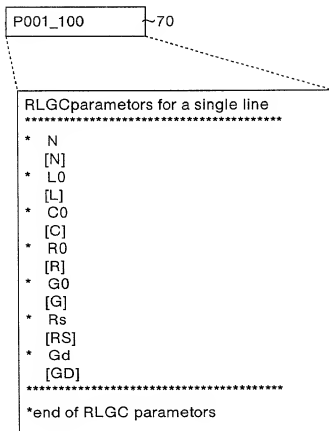


FIG.9

N001_254_1.414 ~80

RLGCparameters for a multi-conductor line

- N
- [N]
- L0
- [L11]
- [L12] [L22]
- C0
- [C11]
- [C12] [C22]
- R0
- [R11]
- [R12] [R22]
- G0
- [G11]
- [G12] [G22]
- Rs
- [RS11]
- [RS12] [RS22]
- Gd
- [GD11]
- [GD12] [GD22]

*end of RLGC parameters

FIG.10

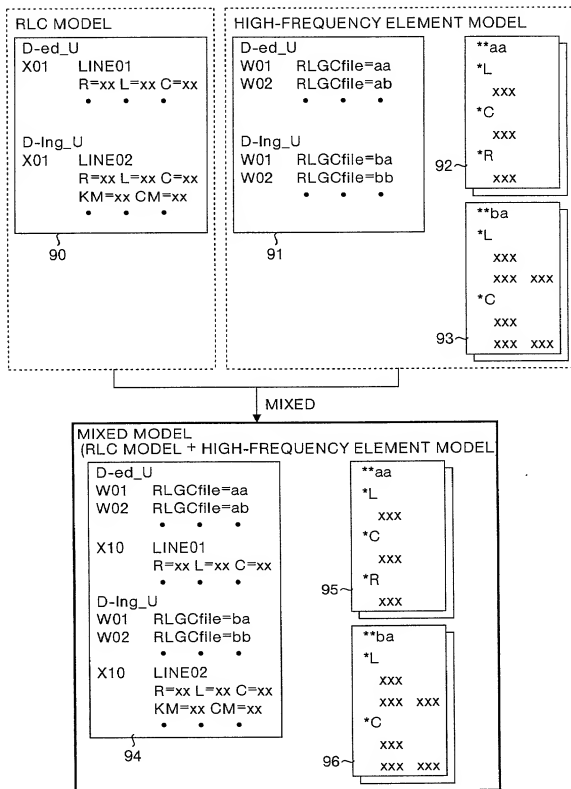


FIG.11

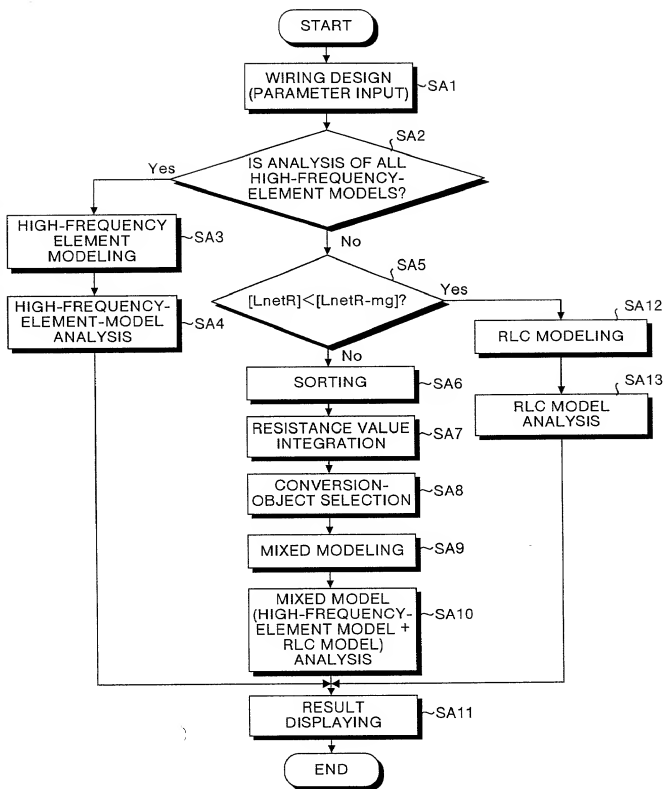


FIG.12

100

d-ed (RESISTANCE VALUE)	d-ing (RESISTANCE VALUE)	TYPE OF HIGH- FREQUENCY ELEMENT	tpd
W7Q(0.2 Ω)	•	HIGH-FREQUENCY ELEMENT01	MINIMUM ↑ ↓ INCREASE
W6Q(0.3 Ω)	•	HIGH-FREQUENCY ELEMENT02	
W5Q(0.4 Ω)	•	HIGH-FREQUENCY ELEMENT01	
W4Q(0.5 Ω)	•	HIGH-FREQUENCY ELEMENT01	
W41(0.5 Ω)	•	HIGH-FREQUENCY ELEMENT01	
•	•	•	
•	•	•	
W21(1 Ω)	W42(0.6 Ω)	HIGH-FREQUENCY ELEMENT01	
(LnetR-mg LIMIT OF d-ed)	W2(1.4 Ω)	HIGH-FREQUENCY ELEMENT02	
•	W3Q(1.2 Ω)	HIGH-FREQUENCY ELEMENT01	
•	(LnetR-mg LIMIT OF d-ing)		
W32(2 Ω)	W31(1.6 Ω)	HIGH-FREQUENCY ELEMENT01	
•	W32(2 Ω)	HIGH-FREQUENCY ELEMENT02	
•	•	•	

101

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FIG.13

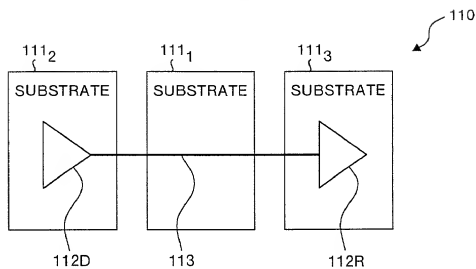


FIG.14

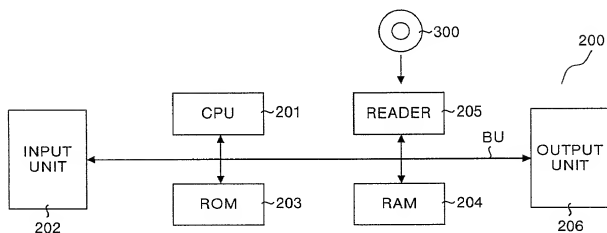


FIG.15

